



## Insulin Tolerance Test

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*You are scheduled for an insulin tolerance test. During the test, insulin will be given to you. Periodic blood samples (and sometimes urine samples) will then be collected to measure how well your pituitary gland is working.*

**Preparation:** After midnight on the day of the test, you may not eat, chew gum, or drink anything except water. You will be told if you are to stop taking any medications before the test.

**Procedure:** You may be asked to arrive 1 hour before the test starts so that a heparin lock can be inserted into your arm or hand. The heparin lock allows blood samples to be taken without your having repeated needle sticks. Insulin will also be given through the heparin lock.

Insulin is given to lower your blood sugar. Low blood sugar (hypoglycemia) signals the pituitary gland to release two hormones: growth hormone (GH) and adrenocorticotrophic hormone (ACTH). ACTH, in turn, signals your adrenal glands to make a hormone called cortisol. At intervals during the test, blood samples will be taken to measure GH and cortisol.

After insulin is given, you will have some or all of these symptoms of hypoglycemia:

- sweating
- dizziness
- pale skin
- hunger
- shakiness
- tiredness
- headache
- fast heartbeat
- feeling like you are breathing faster
- trouble thinking clearly.

Your blood pressure may also rise. Throughout the test, your doctor or nurse will keep a close watch on you, including monitoring your blood sugar level with a bedside meter each time a blood sample is taken. If your blood sugar level drops too low, we will give you medicine to raise it immediately.

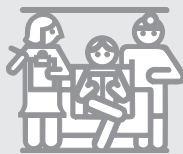
The test will last 2 to 3 hours.

**After the  
Procedure:**

After the last blood sample is taken and if you need no other blood tests, the heparin lock may be removed. You may then eat and resume your usual activities.

If you have questions about the test, please ask. Your nurse and doctor are ready to assist you at all times.

**Special  
Instructions:**



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This information is prepared specifically for patients participating in clinical research at the Warren Grant Magnuson Clinical Center at the National Institutes of Health and is not necessarily applicable to individuals who are patients elsewhere. If you have questions about the information presented here, talk to a member of your healthcare team.

Questions about the Clinical Center? [OCCC@cc.nih.gov](mailto:OCCC@cc.nih.gov)

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